SHIP POWER
YOUR SHORTER ROUTE TO BIGGER PROFITS

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Shipping has a future

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90%
of world trade is still done by sea

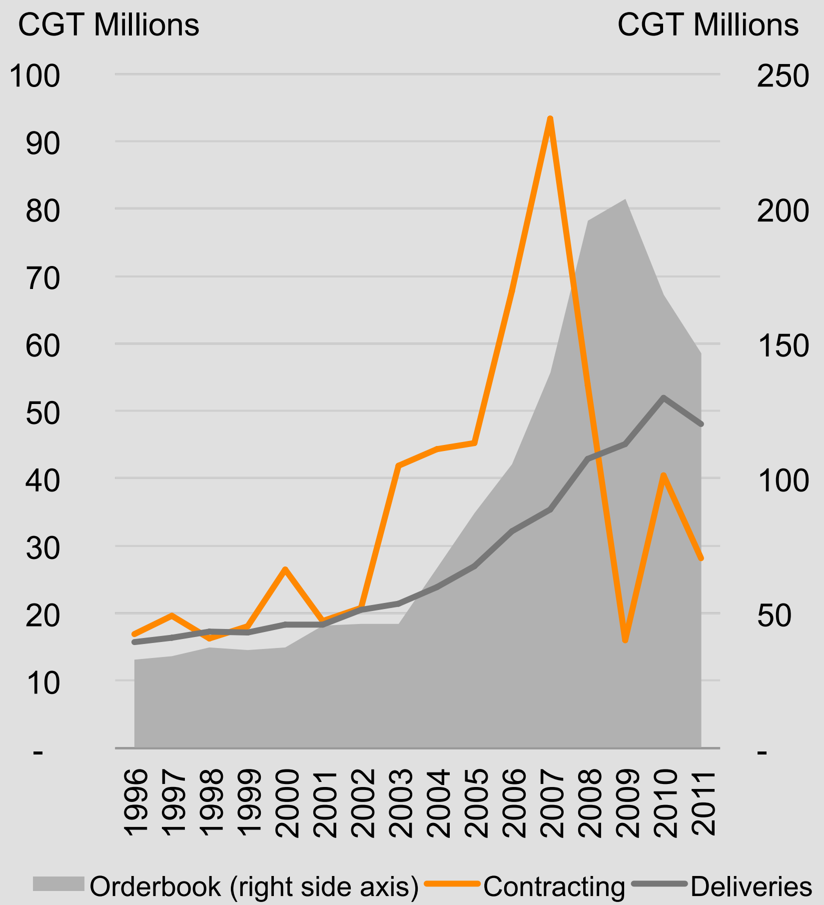
NO SUPRISE
it doesn't cost a thing

LESS THAN 1.0%
of the price of coffee comes from the cost of sea transportation

Sea transports are still the **MOST SUSTAINABLE** means of transporting goods

Shipbuilding activity development

- 2011: a significant shift in contracting activity
  - Mix of vessels contracted favoured specialised tonnage
- Shipyard order books continue to decline
  - Order books continue to be high compared to historical levels, highlighting overcapacity in certain segments
- Deliveries peaked in 2010, after a massive expansion in capacity during 2004-2010
  - Shipyards will face tough competition to secure new orders and fill capacities

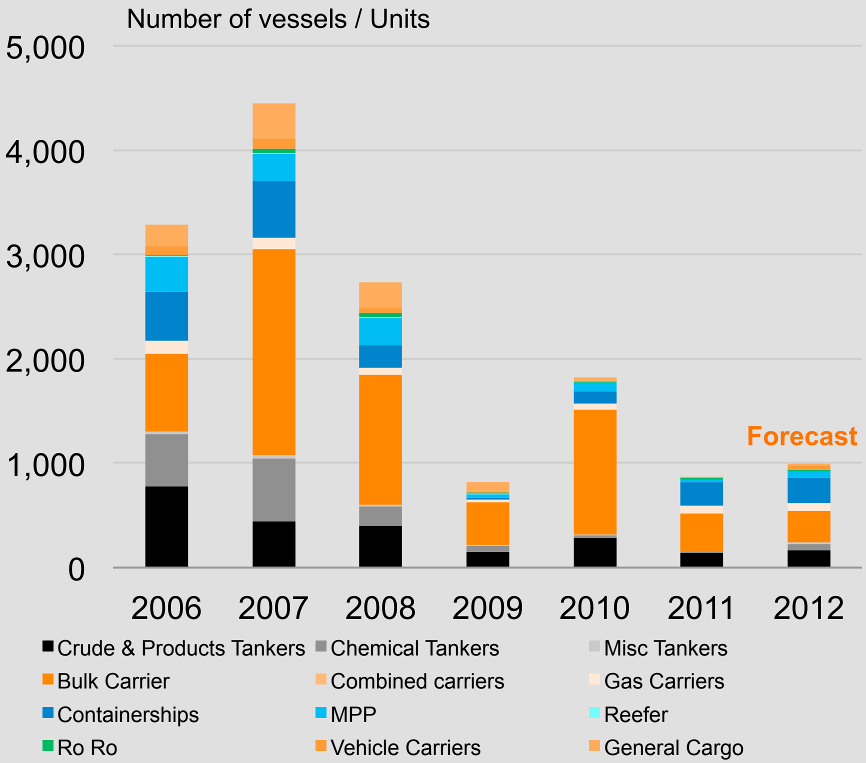


Source: Clarkson Research Services

Merchant: slow down and differentiation

Merchant contracting activity, historical and 2012 forecast

Contracting by vessel category



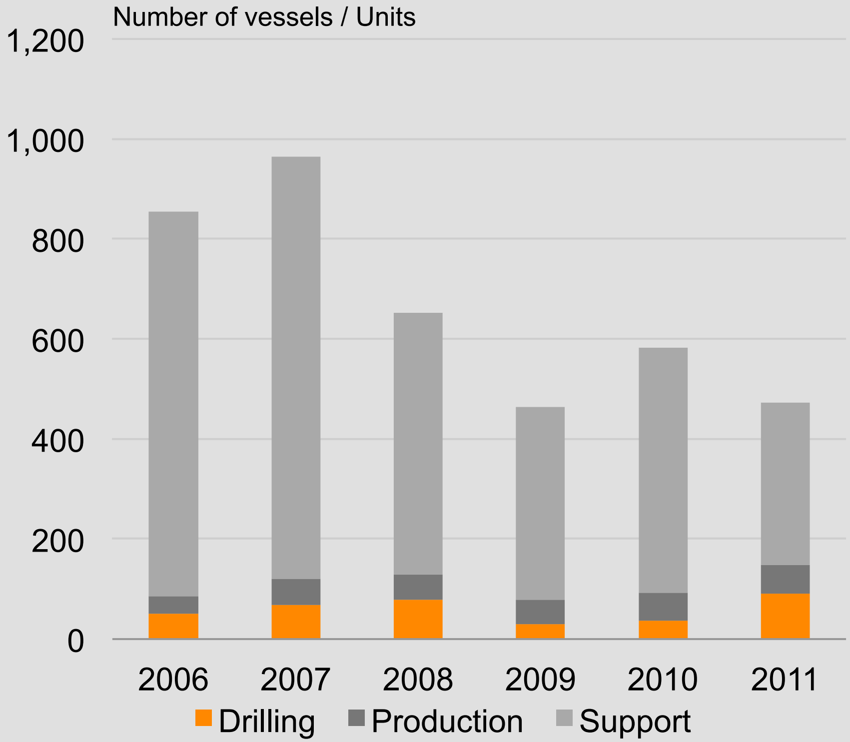
Source: Clarkson Research Services

- Strong niches and slow recovery
- Instability in Middle East drives up oil prices
- LNG demand boosted by oil supply uncertainty and increased anti-nuclear power sentiment
- Shale gas projects in US are flooding the market with cheap gas, leading to increased export potential

Offshore: good fundamentals

Offshore contracting activity

Contracting by vessel category



Source: Clarkson Research Services

Fundamentals are good

- High global demand for oil and gas
- Increased concerns over tight supply/demand balances drive further offshore exploration and production
- Current oil prices support investments
- No over ordering (during boom years) for exploration and production vessels
- Good and vast list of projects (requiring newbuildings or conversions) in the pipeline

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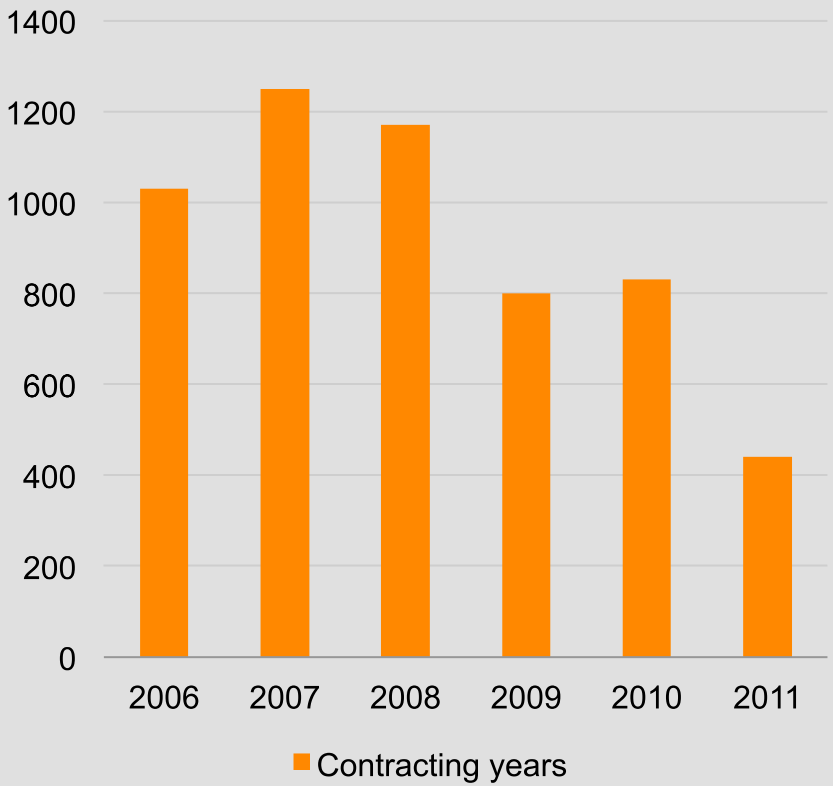
Specials: market stabilising

Specials



Special vessels market demand responding to global financial crisis

- Significant increase in fishing vessel contracting during Q1/2012
- Strong list of newbuilding projects in the pipeline, especially for dredgers, heavy-lift vessels, wind farm installation/support vessels, and inland waterways.

Cruise & Ferry fundamentals are good

- Stable demand for ferries and ROPAX vessels. Renewals of older tonnage is driving current investments.
- Some excessive ordering (during boom years) for certain vessel types, contracting levels are normalising
- Increasing number of Asian C&F projects in the newbuild pipeline

Source: Marine Market Database
Vessels included: Cruisers, ferries, passenger vessels, passenger & cargo vessels/ROPAX

Source: Marine Market Database
Vessels included: Inland vessels and service vessels (fishing vessels excluded)

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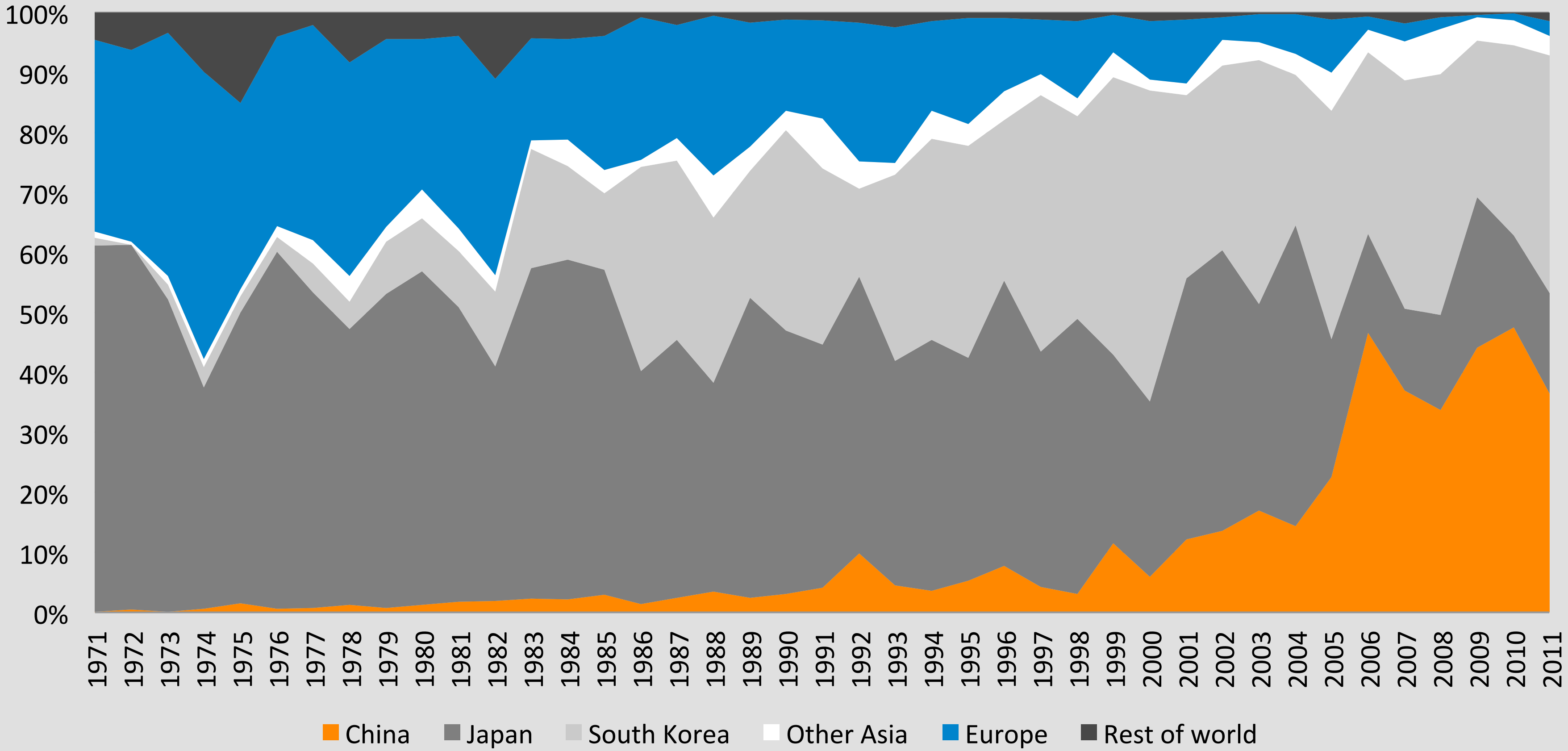
Shipbuilding has moved to Asia

Contracting volumes (DWT): share by region



Source: Wärtsilä's Marine Market Database

Future challenges and opportunities

The fundamentals show risks and opportunities

- Risks of downturn in global economy are tangible
- High oil prices represent a risk towards global economic growth, however they also stimulate investments in exploration and production for oil and gas
- Expansion of emerging economies continues to support growth of demand for transportation of raw materials and energy

Highlights about the present

- Earnings levels are comparable to all time low
- Overcapacity continues to cast shadows in the main merchant segments

The future brings interesting challenges!

- Ship owner base is shifting and increasingly Chinese
- Increasing interest in the market for gas applications
- Increasing focus on energy efficiency and environmental performance
- Increasing competition from Asia

Ship Power's focus on growth

FOCUS ON GROWTH:

Gas fuelled vessels

Environmental compliance / efficiency optimised vessels

Marine Lifecycle Solution | System Integration | Product Sales

FOCUS ON EXCELLENCE:

Operational Excellence and Flexibility
People & Culture

China | Brazil | South Korea | Russia | India

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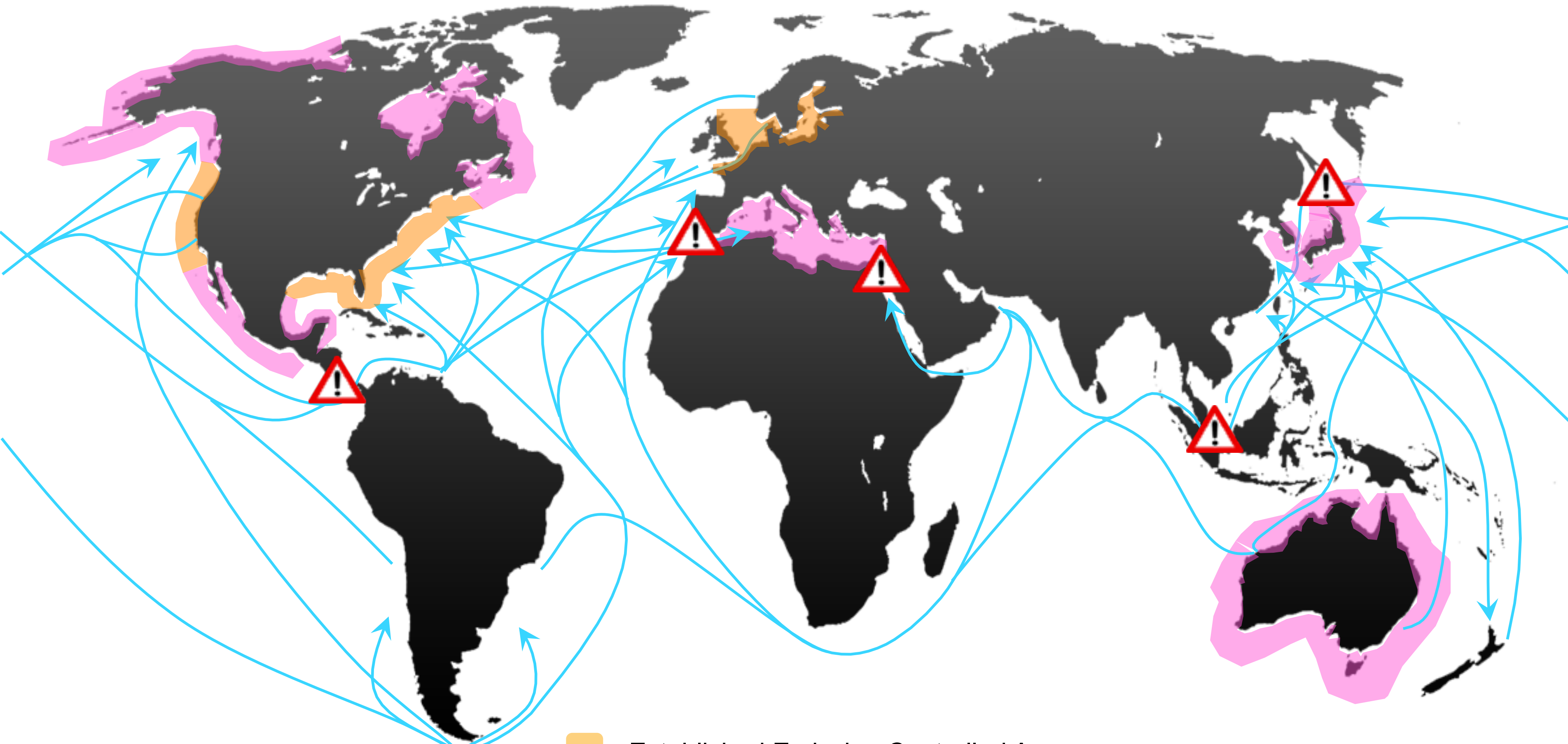
Emission controlled areas will increase



Established Emission Controlled Areas

Emission Controlled Areas under consideration

Shipping critical points

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Alternatives for decreasing emissions

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LNG

- Simultaneous reduction of GHG / SO_x / NO_x / PM
- Market: mainly ships with regular routes and limited autonomy requirements operating in ECAs
- Infrastructure development is needed for larger uptake
- Conversion solution available

HFO

- NO_x: SCR or wet methods
- SO_x: scrubbers
- Market: mostly merchant ships operating a significant time in ECAs

MGO

- NO_x: SCR or primary methods
- Market: ships operating a limited time in ECAs, small ships

Wärtsilä is developing a multi-solution approach to meet requirements for different ship types and operational profiles

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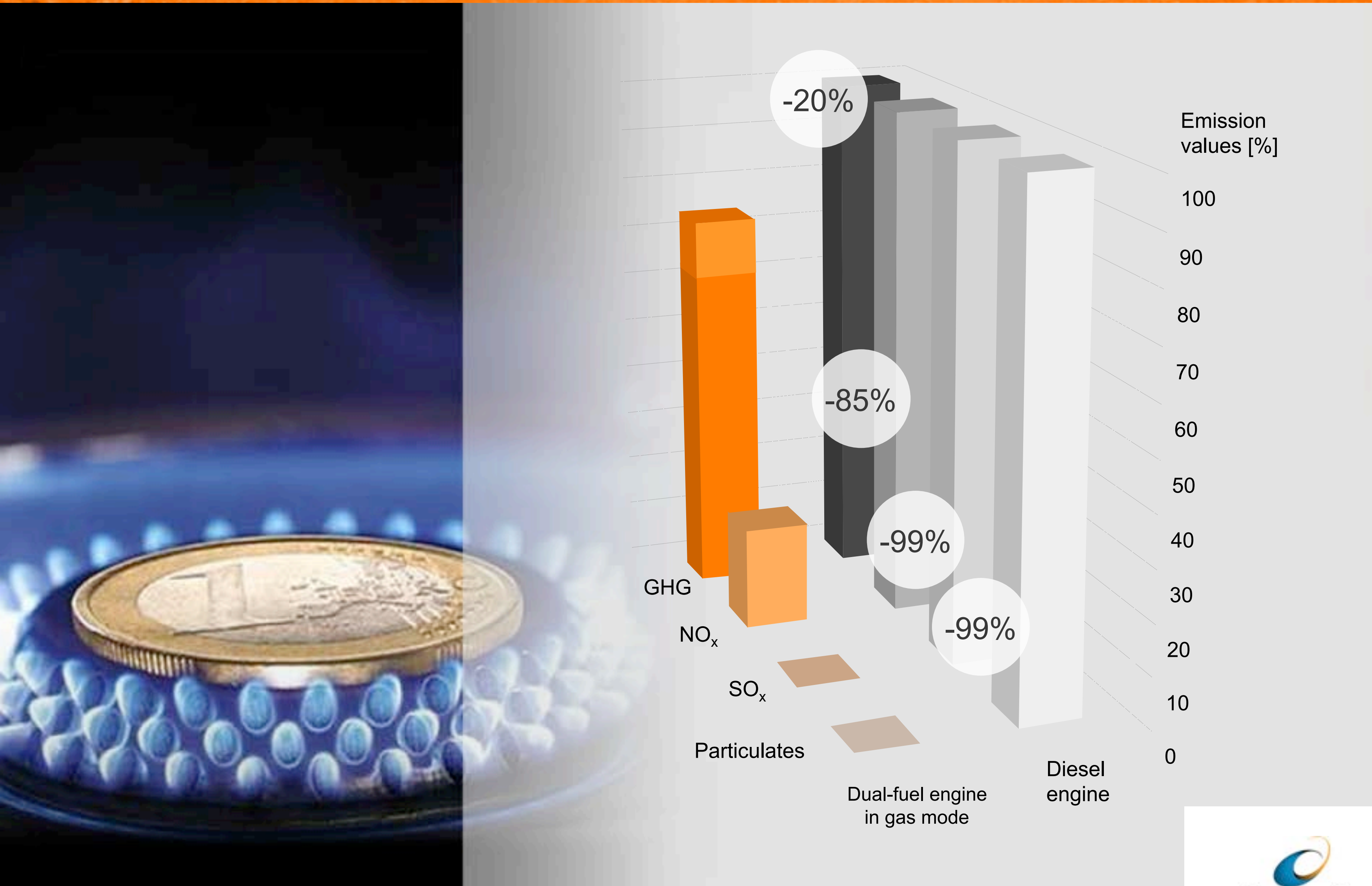
Natural gas reduces emissions



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Gas fuelled vessels - market development & drivers

Political & regulations

- Environmental legislation
- Gas handling regulations
- Predictability of energy policies

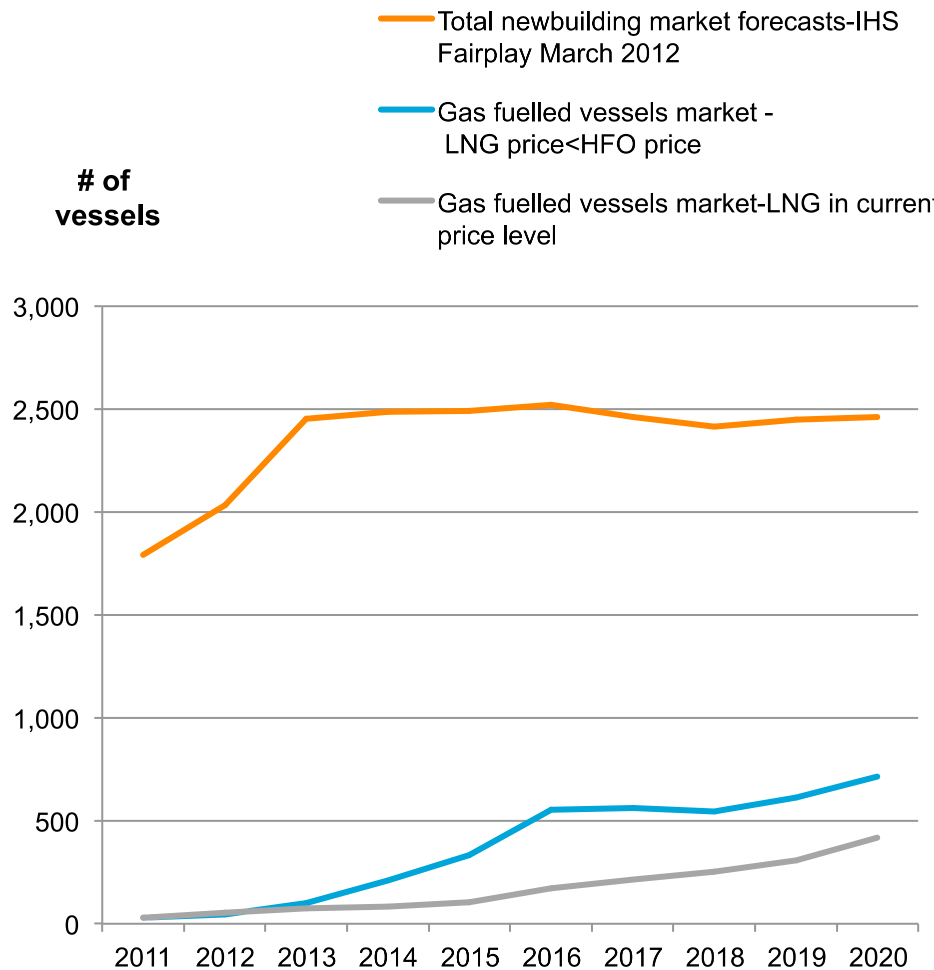
Economical

- Cost of gas vs. abatement technology
- Gas price vs. alternative fuels (HFO)
- Gas availability & bunkering infrastructure

Technological

- Engine technology exists
- Onboard gas storage technology is improving, but feasible already today
- Further application engineering needed

Estimated new building market (contracting)



Main drivers for the market are environmental legislation, fuel price and gas availability

***IHS Fairplay/Lloyds Fairplay = SAI (Institute of Shipping Analysis)**

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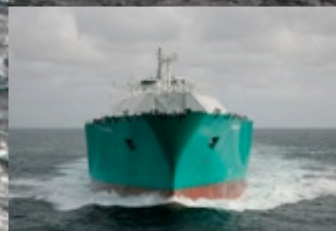
Clear leadership in dual-fuel applications

Power Plants

DF power plants
- 51 installations
- 186 engines
- Online from 1997

Merchant



LNG carriers
- 108 vessels
- 429 engines

Conversion
- 1 Chem. tanker
- 2 engines conv.
- Complete gas train
- Complete design

Offshore

PSVs/FPSOs
- 20 vessels
- 96 engines
- Online from 1994

New orders:
- Harvey Gulf; the first 4 LNG-PSVs to be operated in the Gulf of Mexico

Cruise & Ferry

LNG ferries
- 1+1 vessels
- 4 engines per vessel
- Complete gas train
- 2,800 passengers
- In service in 2013

~180 installations → >5,000,000 running hours

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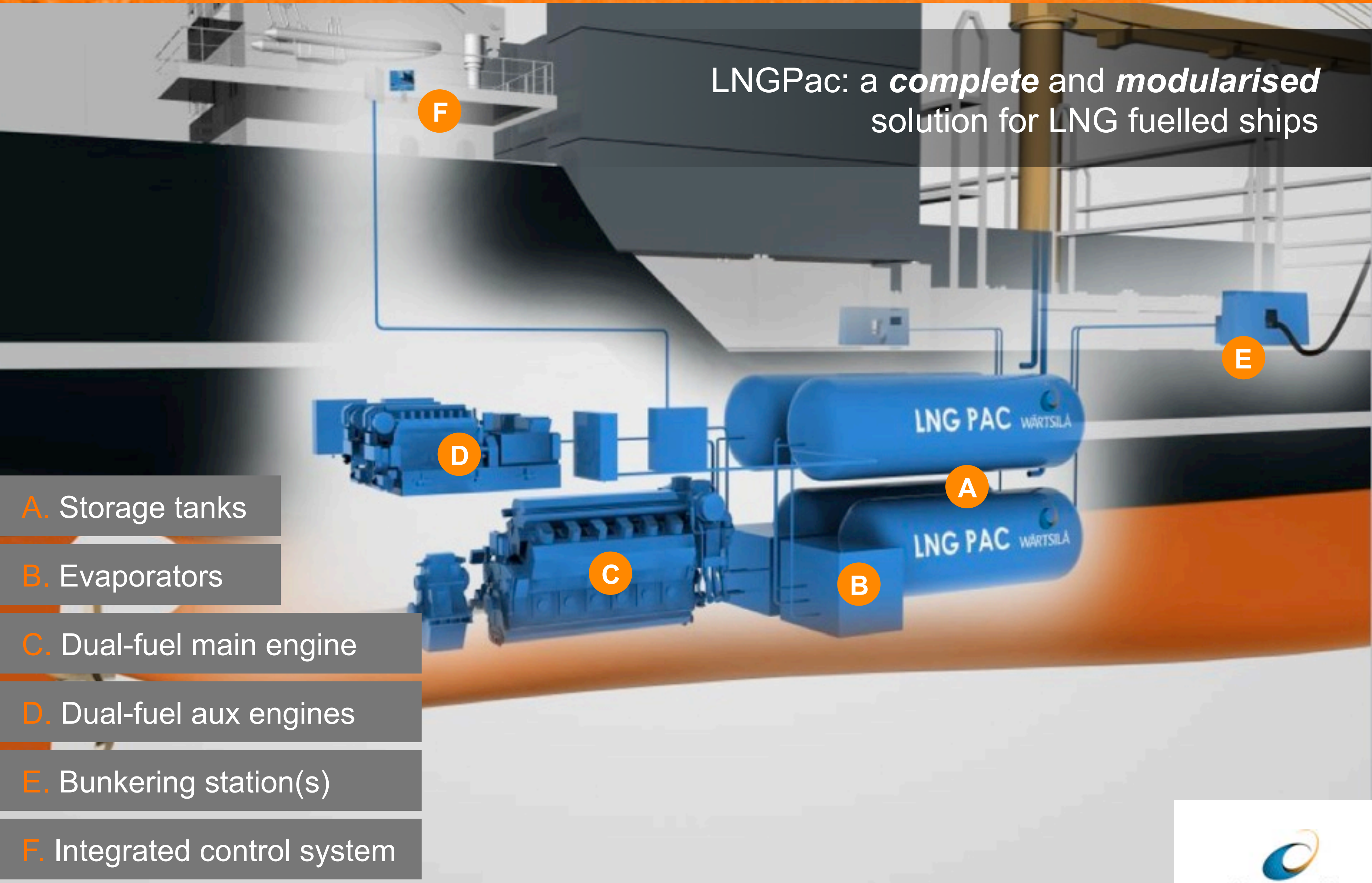
Solutions for LNG powered vessels

LNGPac: a ***complete*** and ***modularised*** solution for LNG fuelled ships



A. Storage tanks

B. Evaporators

C. Dual-fuel main engine

D. Dual-fuel aux engines

E. Bunkering station(s)

F. Integrated control system

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Our low speed dual-fuel engines will comply with IMO regulations

- Program announced in February 2011
- Successful test announced in September 2011
- Dual-fuel capability
  - Fuel flexibility enables low emissions and the lowest operating costs
  - LNG – MDO – HFO
- Low gas feed pressure
  - Safety: no high pressure piping
  - Simple system: low installation and operating costs
- No secondary equipment needed to meet IMO Tier III or 0.1% sulphur limits

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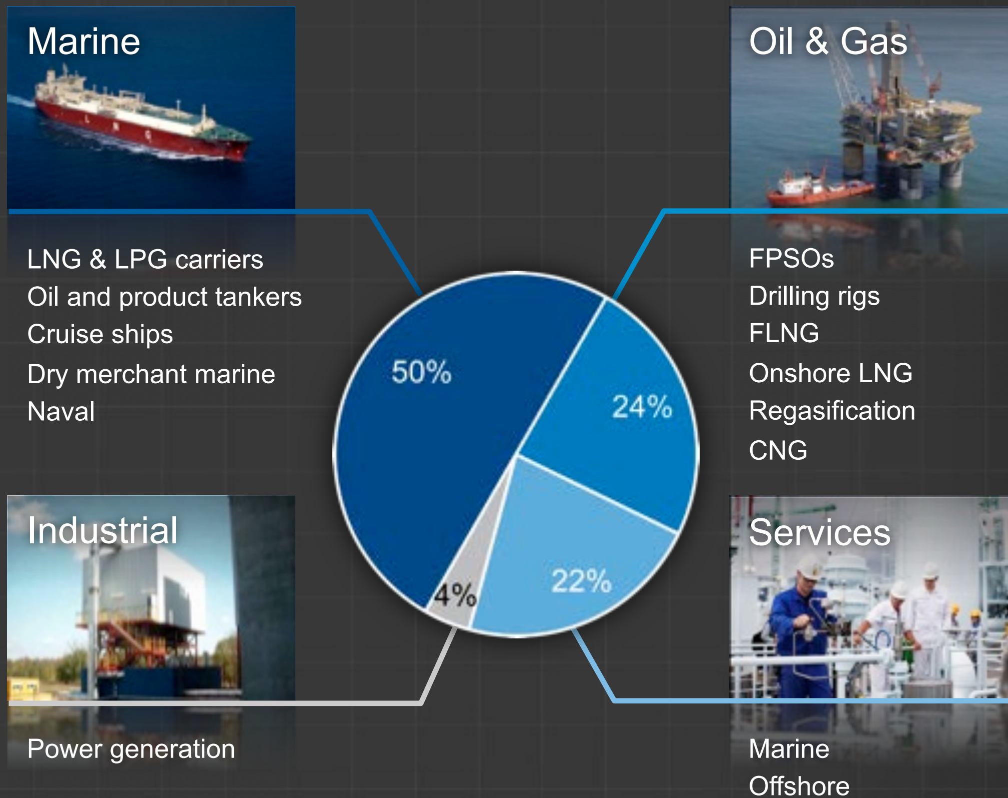
Hamworthy in a nutshell

- Specialist provider of fluid handling equipment and services for marine and offshore
- Leading position in key sectors
- Significant long-term growth opportunities driven by environmental legislation and energy demand
- Strong technology platform and R&D

FY 2010 revenue by sector



Products, solutions and services

Flow solutions

- Deepwell cargo pump systems
- Pump room systems
- Fire fighting systems
- Seawater lift pumps
- Engine room pumps
- Ballast pumps
- Seawater valves

Oil & Gas systems

- LNG/LPG/Ethylene reliquefaction
- LNG regasification
- Small scale LNG plant
- LNG fuel systems
- Oil/water separation
- Hydrocarbon blanketing
- Flare gas recovery

Water systems

- Grey & black water treatment
- Vacuum toilet systems
- Fresh water generators
- Air and water cooled condensers
- High pressure compressors
- Ballast water treatment

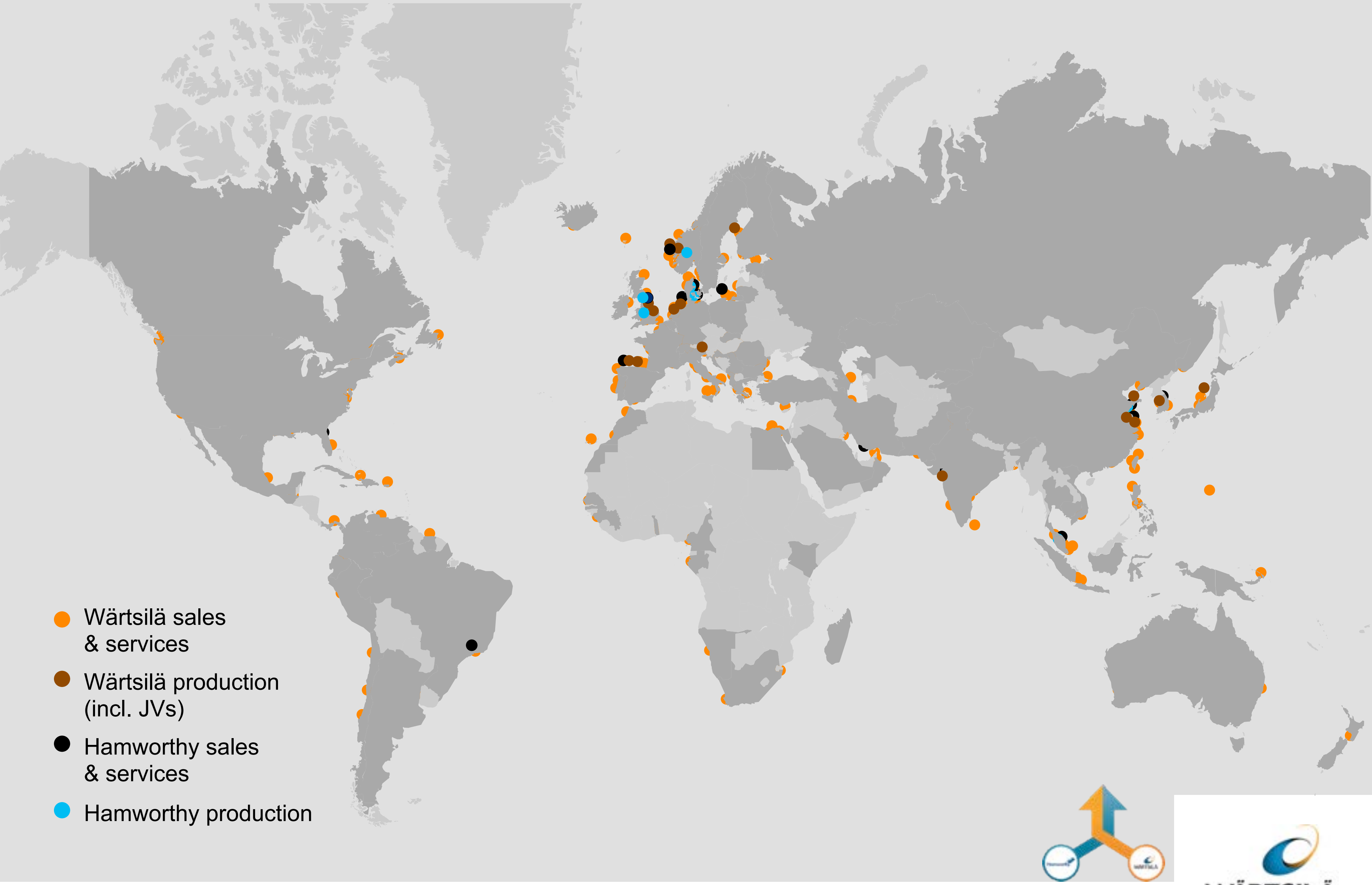
Inert gas systems

- Exhaust gas cleaning
- Inert gas systems
- Nitrogen generators

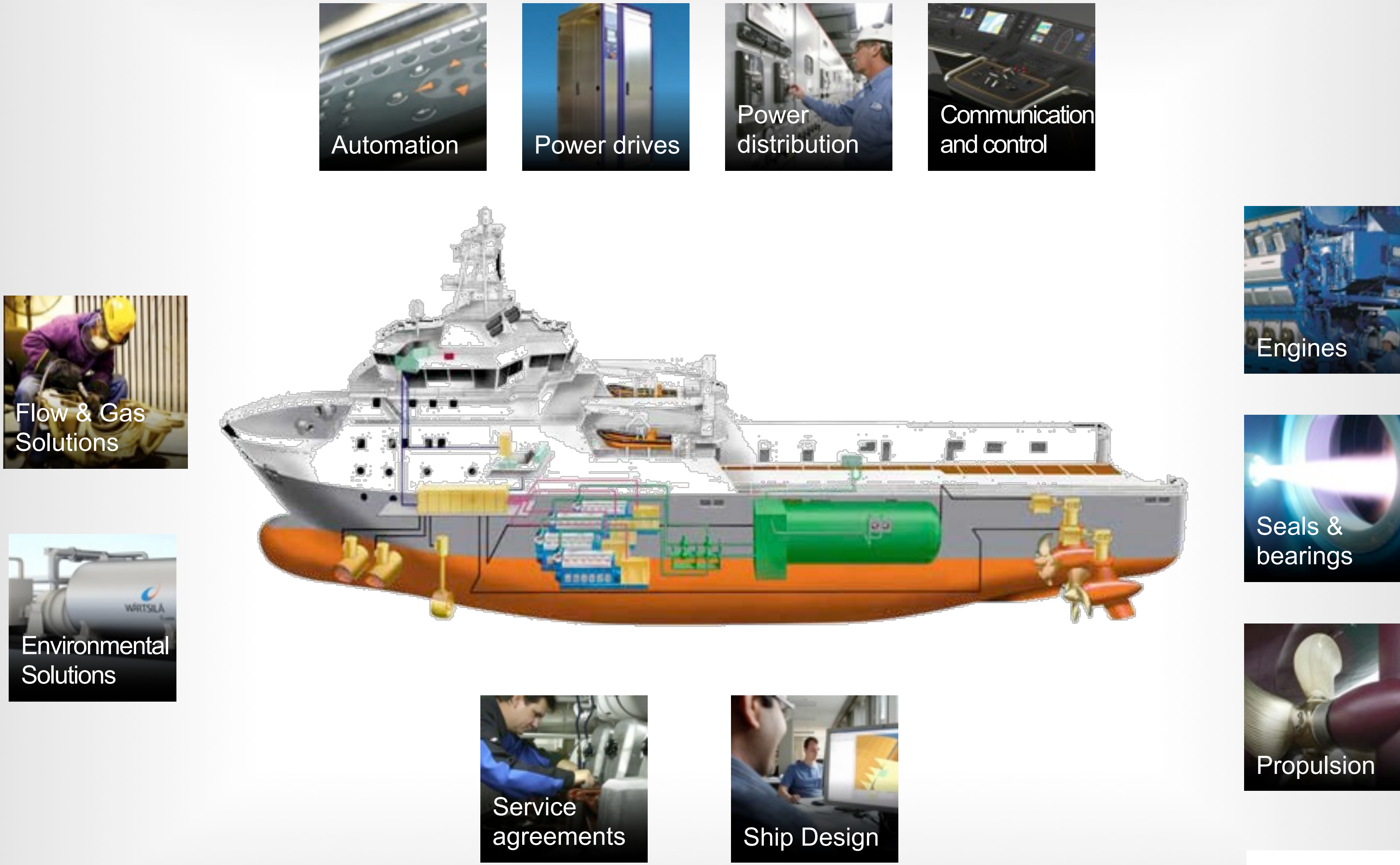
Services

Service | **Replacement** | **Upgrades** | **Spares** | **Training** | **Retrofit**

Hamworthy will benefit from Wärtsilä footprint



Wärtsilä and Hamworthy: total offering



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Supporting our customers in environmental compliance

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Legislation → compliance with all requirements

- Wärtsilä's solutions to receive early approval from all relevant authorities

Functionality → technical risks to be minimised

- R&D competences and capacity
- Testing and validation on land and onboard, partnership with customers
- Design/engineering support: ship design and system integration
- 24/7 support to customers

Costs → focus on minimal total costs

- TCO optimisation (capex, installation, operation and maintenance)

Delivery capacity

- Industrialisation ramp-up plans to manage rapid demand increases

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